DATE: February 23, 2005

TO: Gerald M. O'Brien, Chair

Howard D. Poulson, Vice-Chair

Stephen D. Willett (Air, Waste and Water Management/Enforcement Committee)

FROM: Scott Hassett

SUBJECT: Background Memo for Final Adoption of Proposed Modifications to NR 500

Series

1. Why The Rule Modifications Are Being Proposed

The proposed revisions to the ch.NR 500 series are the result of an 18-month stakeholder process to address long-standing concerns of some landfill owners regarding the standards for the length of leachate collection lines. The proposed revisions will indirectly impact the size of landfills in Wisconsin. The proposed revisions also improve design and construction standards, and require stabilization of landfills.

2. <u>Summary of the Proposed Rule Revisions</u>

These proposed rule revisions will allow longer leachate lines in municipal solid waste (MSW) landfills, improve landfill design and construction standards, and require that measures be taken by MSW landfill owners to reduce the long-term risk of their landfills. The proposed rules also allow for approval of trials that may involve addition of liquids to foster quicker biodegradation, changes in final cover requirements and introduction of run-on of water from precipitation events.

3. How This Proposal Affects Existing Policy

The proposed rule revisions will allow the maximum length of leachate collection piping to increase from 1,200 feet to 2,000 feet. The 1,200-foot limit was required on a case-by-case basis beginning in the mid-1980s and was placed in administrative code in 1996. The purpose of this length limitation was to help ensure that leachate collection piping could be readily cleaned for decades following landfill closure. The proposed rules reflect changes in the current design and construction standards of MSW landfills, and the experiences gained in the past 10 years of constructing landfills in Wisconsin. The maximum width of MSW landfills could increase by approximately two-thirds and the height by about 100 feet with the proposed change. The volume of waste that could be placed in a single MSW landfill would approximately double.



Current landfill design and operation results in landfilled waste being entombed in a dry state. The lack of moisture means that the waste remains in an undecomposed state indefinitely. Should moisture gain access to the waste at some later date, environmental harm could result from the leachate and gas generation under these conditions. This proposed rule will allow the Department to approve adding liquids to degrade the waste faster, thereby reducing the potential long-term threat of landfills.

Increasing the size of MSW landfills may negatively affect waste reduction, reuse and recycling efforts. At the same time these changes may foster better land use and gas (energy) recovery, or promote increased composting of organic materials outside of the landfill.

4. Hearing Synopsis

At its June, 2004 meeting, the Board authorized the Department to hold public hearings to solicit input on the proposed rule revisions. The Department held public hearings on August 17th in Fitchburg and on August 18th in Stevens Point. A total of 6 people offered verbal comments at the hearings. Additionally, 17 sets of written comments were received. Detailed responses to the many comments received are included in ATTACHMENT 1: Response to Public Comments.

5. Changes Made to the Plain Language Analysis or the Fiscal Analyses

Only minor wording changes have been made to the Plain Language Analysis and the Fiscal Analysis.

6. Information on Environmental Analysis

Waste Management program staff, in conjunction with staff from the Environmental Analysis and Review program, determined that an environmental analysis was not needed for this rule revision proposal. ATTACHMENT 2; Summary of Impacts from Proposed Rule Revisions, responds to comments we received on this issue.

7. Small Business Analysis

In the past (pre-1985), a large number of small landfills operated in Wisconsin. With the enactment of the Federal RCRA sub-title D regulations, small landfills started to disappear due to the requirements and the cost of compliance. Currently, no MSW landfills operating in Wisconsin meet the definition of a small business. Therefore, the Department does not anticipate any increased or new impact on small business.